

K02288

Catalog No: tcsc3395



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

1431985-92-0

Formula:

$C_{20}H_{20}N_2O_4$

Pathway:

Protein Tyrosine Kinase/RTK;TGF-beta/Smad

Target:

ALK;TGF- β Receptor

Purity / Grade:

>98%

Solubility:

DMSO : \geq 58.6 mg/mL (166.30 mM)

Observed Molecular Weight:

352.38

Product Description

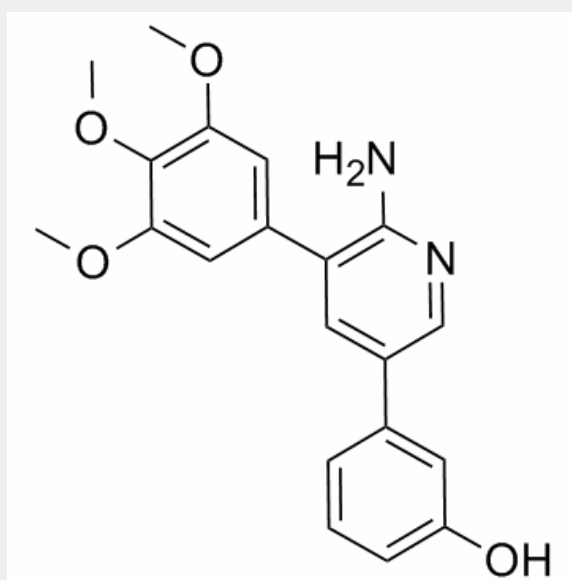
K02288 is a potent inhibitor of **ALK**, and inhibits ALK1/2/3/6 with **IC₅₀**s of 1.8/1.1/34.4/6.3 nM; K02288 is less potent against ALK4/5, with IC₅₀s of 302 nM and 321 nM.

IC50 & Target: IC50□1.8 nM (ALK1), 1.1 nM (ALK2), 34.4 nM (ALK3), 6.3 nM (ALK6), 302 nM (ALK4), 321 nM (ALK5)^[1]

In Vitro: K02288 reduces a robust phosphorylation of Smad1/5/8 induced by BMP4 stimulation, with an apparent IC₅₀ of 100 nM.

K02288 causes near complete inhibition of Smad2 phosphorylation at 0.5 μM ^[1]. K02288 binds to ALK1 in an ATP-mimetic fashion with two hydrogen bonds to the kinase hinge. K02288 also inhibits BMP9-ALK1 signalling, and induces a hypersprouting phenotype in HUVECs^[2].

In Vivo: K02288 (1 μM) induces dysfunctional angiogenesis in a chick embryo CAM model^[2].



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